

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re Application of:

John Christopher Rudin

Serial No.: 10/563,679

Filed: June 9, 2006

For: Thin Film Transistor Device with Metallic Electrodes

Confirmation Number: 1520

Group Art Unit: 2814

Examiner: Diana C. Garrity

Docket No.: 200300815-4

**REPLY BRIEF**

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The Examiner's Answer mailed August 5, 2009 has been carefully considered. In response thereto, please consider the following remarks.

**AUTHORIZATION TO DEBIT ACCOUNT**

It is not believed that extensions of time or fees for net addition of claims are required, beyond those which may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefore (including fees for net addition of claims) are hereby authorized to be charged to deposit account no. 08-2025.

## **REMARKS**

The Examiner has provided in the Examiner's Answer various responses to arguments contained in Appellants' Appeal Brief. Although the Examiner's Answer has added some additional remarks in response to Appellants' arguments, the substance of the rejections and the Examiner's positions have not changed. Accordingly, Appellants stand behind the arguments set forth in the Appeal Brief. In addition, Appellants address selected responses in the following.

### **I. STATUS OF THE CLAIMS**

Claims 1 – 9, 12, 25, and 26 currently stand rejected. No claims are allowed. Appellants appeal the final rejection of claims 1 – 9, 12, 25, and 26.

### **II. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Independent claims 1 and 25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Number 6,326,640 ("Shi"). Dependent claims 2 – 9 and 26 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Number 6,326,640 ("Shi"). Dependent claim 12 stands rejected under 35 U.S.C. 103(a) as being obvious in view of U.S. Patent Number 6,326,640 ("Shi").

### **III. ARGUMENTS**

The Examiner first continues to argue "***a second layer comprising a second metal portion of the metallic source electrode, a second metal portion of the metallic drain electrode, the deposited semiconductor material and dielectric material between the semiconductor material and the metallic gate electrode***" as recited in claim 1 and substantially in other independent claims is not a patentable element under 35 U.S.C. §102(b). While in the final Office Action mailed December 29, 2008, the Examiner argued that this

element is part of a product by process claim and given no patentable weight (see FOA page 2, third to last line), the Examiner has since re-focused the rejection to *Shi*'s alleged disclosure of this element without recanting the product by process assertion. If the Examiner is continuing to assert that this is a product by process element, Appellants continue to argue this point as “**a second layer comprising a second metal portion of the metallic source electrode, a second metal portion of the metallic drain electrode**” is clearly not a process.

In the alternative, if the Examiner is now changing his position that this element is not a product by process element and should be given patentable weight, Appellants agree. However, *Shi* still fails to disclose this element pursuant to a proper rejection under 35 U.S.C. §102(b). While the Examiner asserts that the “claimed device claims a first metal portion of a source electrode directly adjacent to a second metal portion of a source electrode (and likewise regarding the drain electrode). In the final device, the two metal portions of the source electrode are indistinguishable from one another (and likewise the drain electrode)” (Examiner’s Answer, page 9, line 27), Appellants disagree.

First, the Examiner is inferring that the metal portions are indistinguishable, without any support. Second, the specification of the present application states “[t]he join between the first layer 316 and the second layer 318 through the source S and the drain D may be discernable. The metal portions 310a, 310b, 310c, 324a, and 324c will generally contain artifacts of the electrolytic process by which they are formed” (page 9, line 2). As illustrated in this passage, the layers are distinguishable for at least the reason that the specification clearly indicates that layers may be discernable.

Second, notwithstanding the argument above, *Shi* cannot disclose “a second layer comprising a second metal portion of the metallic source electrode, a second metal portion of the metallic drain electrode, **the deposited semiconductor material** and dielectric material between the semiconductor material and the metallic gate electrode” as recited in claim 1. Even

if for sake of argument, the Examiner's classification of *Shi*'s conductive strips 75 and 76 as part of the second layer is correct, the organic semiconductor film (74) is clearly not part of that second layer. More specifically, the dielectric material 72, along with the lower halves of the conductive strips 75 and 76 form a clear division between the second layer and a third layer. Consequently, the semiconductor film (74) would constitute the third layer. As claim 1 clearly requires that the second layer include the deposited semiconductor, *Shi* does not disclose all the elements of claim 1.

Further, orientation film 73 is not a substrate, as argued by the Examiner. In fact, nowhere does *Shi* even suggest that a substrate would be configured with any of the embodiments disclosed therein (or how such configuration would be arranged). Consequently, the orientation film 73, (which would be a fourth layer), cannot read on "a third layer comprising a substrate, wherein the first, second and third layers are arranged in order such that the second layer is positioned between the first layer and the third layer" as recited in claim 1.

Similarly, the Examiner argues with regard to claim 2 (and other claims) "[t]he expression 'the metallic source electrode, drain electrode, and gate electrode comprising electro-deposited metal' is/are take to be a product by process limitation and is given no patentable weight" (Examiner's Answer, page 4, line 1). Again, Appellants disagree. As indicated in the passage of the specification, cited above, the metal portions will contain artifacts of the electrolytic process by which they are formed. Consequently a claim that recites the electrolytic process cannot be a product by product element because there is a difference in the final product, due to the type of electrolytic being used. Consequently, the rejection of claims based on this logic is improper.

Therefore, for the reasons presented herein and the reasons earlier presented in the Appeal Brief, the cited references are deficient in disclosing claimed features, and the

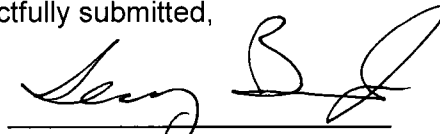
arguments set forth in the Appeal Brief still stand. The rejection of the pending claims should be overturned.

### **CONCLUSION**

In summary, it is Appellants' position that Appellants' claims are patentable over the applied cited art references and that the rejection of these claims should be withdrawn. Appellants therefore respectfully request that the Board of Appeals overturn the Examiner's rejection and allow Appellants' pending claims.

Respectfully submitted,

By:

A handwritten signature in black ink, appearing to read 'Anthony F. Bonner Jr.', written over a horizontal line.

Anthony F. Bonner Jr.  
Registration No. 55,012